

## **AMENDMENTS TO THE CLAIMS**

The following claims replace all prior versions and listings of claims in the application:

1. (Previously Presented) A distributed conferencing system, comprising:
  - a system communication bus;
  - a plurality of conferencing nodes connected to said system communication bus, each of said plurality of conferencing nodes comprising:
    - means for measuring a characteristic of each of a number of local participant input signals;
    - processing means, connected with said measuring means, for distinguishing significant signals from non-significant signals within said local participant input signals by comparison of said measured characteristic;
    - communication means, connected with said processing means and said system communication bus, for communicating said measured characteristic of each of said significant signals, to said plurality of conferencing nodes and for receiving said measured characteristic of each of said significant signals of remote participant input signals from said plurality of conferencing nodes;
    - comparison means for comparing said measured characteristic of each of said significant signals of said local participant input signals and said remote participant input signals.

2. (Currently Amended) [[A]] The distributed conferencing system according to Claim 1, wherein [[:]] ~~said measured characteristic is the power level of said signal the~~ means for measuring a characteristic further comprises:

power measuring means for measuring power levels of each of the number of local participant input signals.

3. (Currently Amended) [[A]] The distributed conferencing system according to claim 2, wherein [[:]] said processing means identifies which of the number of the local participant input signals ~~having the~~ have highest power levels from the power levels measured from each of the number of local input signals.

4. (Currently Amended) [[A]] The distributed conferencing system according to Claim 2, each of said nodes further comprising:

gain control means, interconnected with said processing means, for individually controlling a gain applied to each of said number of local participant input signals, after said power measuring means has measured the power on said number of local participant input signals; and

summing means, interconnected with said processing means, for summing said number of local participant input signals, after said gain ~~control~~ has been applied to said number of local participant input signals.

5. (Currently Amended) The distributed conferencing system of claim 4, wherein:  
said communication means also communicates said summed number of local  
participant input signals to all other of said plurality of conferencing nodes.

6. (Currently Amended) The distributed conferencing system of claim 5,  
wherein[[:]] said communication means further comprises:

a multiplexing means for multiplexing said summed number of local participant  
input signals and said measured power levels for a plurality of said number of local  
participant input signals into a multiplexed node signal.

7. (Currently Amended) The distributed conferencing system of claim 6, wherein  
[[:]] said communication means further comprises:

a demultiplexing means for receiving and demultiplexing said each of the  
multiplexed node ~~signal~~ signals generated by ~~each of the other nodes~~ of said plurality  
of conferencing nodes other than each of the conference nodes' own multiplexed node  
signals.

8. (Currently Amended) The distributed conferencing system of claim 7, wherein:

said system communications bus is a time-division multiplexing bus  
interconnecting said communication means of each of said plurality of conferencing  
nodes that conveys said multiplexed node signal generated by each of said plurality of

conferencing nodes.

9. (Currently Amended) The distributed conferencing system of claim 5, wherein  
[[:]] said processing means determines ~~the~~ a relative power levels level of each said  
summed number of local participant input signals communicated ~~said remote~~  
~~participant input signals~~ from said plurality of conferencing nodes.

10. (Currently Amended) The distributed conferencing system of claim [1] 4,  
wherein [[:]] at each of said plurality of conferencing nodes, said processing means  
identifies a number, N, of said significant ~~participant input signals from said local~~  
~~participant signals~~.

11. (Currently Amended) The distributed conferencing system of claim 10, wherein  
[[:]] at each of said plurality of conferencing nodes, said processing means identifies a  
number, N, of said significant ~~participant input signals from said local participant~~  
~~signals~~ and a set of additional significant signals communicated ~~said participant signals~~  
from said plurality of conferencing nodes.

12. (Currently Amended) The distributed conferencing system of claim 10, wherein  
[[:]] at each of said plurality of conferencing nodes, said processing means causes said  
gain control means to apply a gain level that effectively mutes each of said number of

local participant input signals that is not one of said number, N.

13. (canceled)

14. (Currently Amended) The distributed conferencing system of claim 12, wherein  
[[:]] at each of said plurality of conferencing nodes, said ~~plurality~~ number of local  
participant input signals having their measured power communicated to all other of  
said plurality of conferencing nodes are a set of said number of local participant input  
signals having ~~the greatest~~ highest power levels.

15. (Currently Amended) The distributed conferencing system of claim 14, wherein:  
said number, N, of the number of local participant input signals from said  
plurality of conferencing nodes having the ~~greatest~~ highest power levels is set equal to  
the number of said plurality of remote participant input signals having their measured  
power communicated to all other of said plurality of conferencing nodes.

16 - 19. (Canceled)

20. (Currently Amended) The distributed conferencing system of claim 4, further  
comprising:

combining means, interconnected with said communication means and said

gain control means, for combining said number of ~~remote~~ local participant input signals from each of said plurality of conferencing nodes, after said gain control has been applied to said number of local participant input signals; and

outputting means for outputting said combined number of local participant input signals from each of said plurality of conferencing nodes to each of a number of local conference participants ~~creating said local participant input signals~~, wherein

said outputting means effectively mutes the contribution of each of the number of local conference participant's own input signal, within said combined number of local participant input signals, before outputting said combined number of local participant input signals to said number of local conference participants.

21. (Currently Amended) A method for transmitting communication signals in a telephony conferencing system, comprising:

connecting a plurality of telephony conference nodes, comprising a local conference node and at least one remote conference node, to a system communication bus;

connecting a plurality of local communication channels to said local conference node and a plurality of remote communication channels to each of said local and said remote conference nodes ~~node~~ node;

measuring power levels of local input signals received in the local conference node through the local communication channels;

measuring power levels of remote input signals received in the remote conference node through the remote communication channels;

selecting, in said local conference node, a set of the local input signals received in said local communication channels that are measured with highest power levels in said local conference node and transmitting said set of the local input signals and said highest power level measurements of said set of the local input signals to said remote conference node;

determining, in said remote conference node, a set of remote input signals received in said remote communication channels having highest power levels in said remote node and transmitting said set of remote input signals and said highest power level measurements of said set of remote input signals to said local conference node;

comparing, in each node, ~~said power level measurements for all of said local and said remote sets of input signals~~ the measured power levels of the local input signals with the measured power levels of the remote input signals to determine the local input signals and the remote input signals with highest power levels;

determining, in said local conference node and said remote ~~nodes~~ conference node, an aggregate sum of said remote input signals and said local input signals having said highest power levels from said comparing ~~all of said local and remote sets of input signals;~~ and

transmitting said aggregate sum to each of said local communication channels and said remote communication channels as an output,

wherein, if one of said local input signals includes said highest power levels, then transmitting said one of said local input signals to said local communication channels as an output.

22. (Currently Amended) The method of claim 21, wherein each of said local communication channels and each of said remote communication channels ~~receives an output of~~ outputs voice signals that are converted from said aggregate sum input signals.

23. (Currently Amended) The method of claim 21, ~~wherein,~~ further comprising:  
if one of said ~~set of~~ local input signals is determined as having ~~has~~ the highest power levels, applying a gain said one of said local input signals.

24. (Currently Amended) The method of claim 21, further comprising:  
~~modifying a gain for said set of signals within each node and muting said local~~  
input signals not within said aggregate sum set of local input signals and of said remote input signals.

25. (Currently Amended). The method of claim 21, further comprising:  
providing a combiner in ~~each~~ the local conference node for summing ~~each set of the local input signals~~ into a summed local signal; and



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transmitting said summed local signal and ~~said highest power levels for each~~  
~~set of the power level measurements of the local input~~ signals to said ~~nodes~~ remote  
conference node that is connected to said system communication bus ~~other than a~~  
~~node originating said summed signal.~~